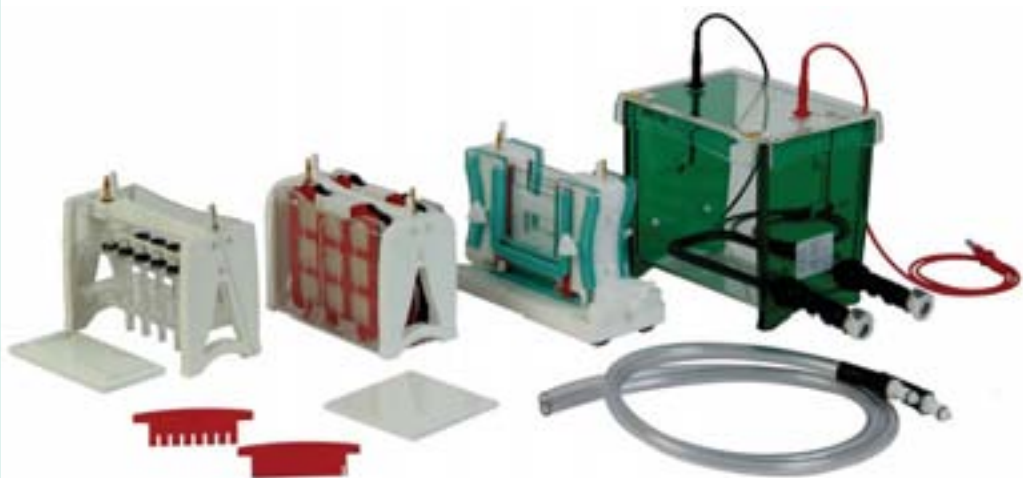


Vertical Gel Units

BENEFITS INCLUDE

- **Comprises** - one standard GRM, one CAPGRM and one EBGRM, which are interchangeable within the same gel tank, allowing the user to perform PAGE, IEF and electroblotting either independently or as part of a fully integrated system
- **CAPGRM** - for first dimension electrophoresis of up to 10 ampholyte capillary gels, a maximum 8 or 17cm in length and 1 or 4mm in internal diameter
- **Twin-plate standard GRM** - designed specifically for SDS-PAGE techniques requiring self-cast gels, although commercially available 10 x 10cm precast gels may be used in the TV100-GRM
- **Twin-cassette EBGRM** - allows simultaneous transfer of 2 polyacrylamide gels in colour-coded electroblotting cassettes, while plate-electrodes only 6cm apart maximise the intensity of the electric field
- **Casting base and cooling** - included as standard - act in tandem with glass plate stops within the GRM to lock the plates firmly in position on the casting base, whereas snap-lock connectors allow the cooling coil within the tank to be connected to the JULABO chiller unit for high voltage/current separations
- **Colour-coded combs and spacers** - available in 1 and 1.5mm thicknesses
- **Nitrocellulose and PVDF membranes available plus SERVA 10 x 10cm precast gels, ampholytes, 2-D and PAGE chemicals** - see pages 135-142 for further details



TV Complete Modular Systems

The TV complete modular systems provide a fully integrated solution within one gel tank for both two-dimensional (2-D) electrophoresis and electroblotting. These systems are available in existing TV100, TV200 and TV400 formats and comprise individual gel-running modules designed specifically for denaturing or native PAGE (GRM), capillary gel isoelectric focusing (CAPGRM) and electroblotting (EBGRM). Following 2-D electrophoresis, the EBGRM can be used to transfer second dimension SDS-PAGE gels for further analysis by western blotting, providing enhanced sensitivity.

TECHNICAL SPECIFICATION

		TV100YK-MODSYS	TV200YK-MODSYS	TV400YK-MODSYS						
Unit Dimensions (W x D x H)		28 x 15 x 18cm	40 x 15 x 17cm	38 x 15 x 27.5cm						
Inner Tank Dimensions (W x D x H)		16.5 x 11 x 15cm	27 x 11 x 15cm	27 x 12.5 x 25cm						
Plate Dimensions (W x H x T)		10 x 10 x 0.2cm	20.5 x 10 x 0.4cm	20.5 x 20 x 0.4cm						
Standard Spacer Dimensions (W x H x T)		1 x 10 x 0.1cm	2 x 20 x 0.1cm	2 x 20 x 0.1cm						
Active Gel Dimensions (W x H)		8 x 8.5cm	16.5 x 8.5cm	16.5 x 17.5cm						
Sample Capacity		2 x 1 / 2 x 12	2 x 1 / 2 x 24	2 x 1 / 2 x 24						
Recommended Buffer Volume (PAGE GRM)	Inner Buffer Chamber	90ml	300ml	700ml						
	Gel Tank	1600ml	3800ml	4200ml						
Recommended Running Conditions for SDS-PAGE	Voltage	100 - 150V (10 - 15V/cm)	150 - 200V (15 - 20V/cm)	200 - 300V (10 - 15V/cm)						
	Current	10 - 15mA	15 - 20mA	30 - 40mA						
	Time	1 - 1.75h	1.5 - 2h	2 - 2.5h						
Capillary Dimensions	Inner Diameter	1mm	1mm	1mm						
	Outer Diameter	5mm	5mm	5mm						
	Length	80mm	80mm	170mm						
Recommended Buffer Volume (CAPGRM)	Upper Buffer Chamber	200ml	300ml	300ml						
	Gel Tank	1600ml	3800ml	4200ml						
Recommended Running Conditions for IEF of Capillary Gels		Pre-run	Separation	End of Run	Pre-run	Separation	End of Run	Pre-run	Separation	End of Run
	Voltage	200V	400V	500V	200V	400V	500V	200V	400V	500V
	Time	0.5h	3h	0.5h	0.5h	3h	0.5h	0.5h	6h to 18h	0.5h
	Volt-hours	100Vh	1200Vh	250Vh	100Vh	1200Vh	250Vh	100Vh	2400 - 7200Vh	250Vh
Distance Between Plate Electrodes in EBGRM		6cm	6cm	6cm						
Electroblotting Cassette Dimensions (W x L)		11.5 x 10.5cm	20.5 x 10cm	20.5 x 20cm						
Active Transfer Area		71cm ²	117cm ²	289cm ²						
Recommended Running Conditions for Electroblotting	Voltage	100V	100V	200V						
	Current	75mA (0.6-0.8mA/cm ²)	75mA (0.6-0.8mA/cm ²)	150mA (0.8-1.0mA/cm ²)						
	Time	4 - 6h	4 - 6h	6h to overnight						
Snap-lock Connectors for Cooling Coil	Inner Diameter	10mm	10mm	10mm						
	Outer Diameter	12mm	12mm	12mm						
Quick-fit Tubing	Inner Diameter	10mm	10mm	10mm						
	Outer Diameter	12mm	12mm	12mm						
Casting Base Silicone Seal Dimensions (W x L x H)		1.5 x 11 x 0.8cm	1.7 x 22.5 x 0.8cm	1.7 x 22.5 x 0.8cm						
Power Output Connectors (diameter)		Shrouded, 4mm	Shrouded, 4mm	Shrouded, 4mm						
Recommended Power Supplies		Consort EV215 or EV261	Consort EV215 or EV261	Consort EV215 or EV261						

ORDERING INFORMATION

Complete System

Twin-plate mini-gel unit with GRM and cooled gel tank, with built-in cooling coil and quick-fit tubing, lid, 2 x (10 x 10cm; W x H) plain glass plates, 2 x (10 x 10cm) notched glass plates, 1 x dummy plate, 4 x 1mm thick spacers, 2 x spacer aligners and 2 x 1mm thick 12-sample combs, casting base and 2 x silicone seals; CAPGRM, 10 x 1mm glass capillaries, 4 x 1.5mm thick spacers, 2 x 1.5mm thick 1-D preparatory combs, 10 x blanking ports and 1 x gel extraction platform; plus EBGRM, 2 x electroblotting cassettes and 4 x fibre pads

Part No.



TV100YK-MODSYS

Twin-plate wide format mini-gel unit with GRM and cooled gel tank, with built-in cooling coil and quick-fit tubing, lid, 2 x (20.5 x 10cm; W x H) plain glass plates, 2 x (20.5 x 10cm) notched glass plates, 1 x dummy plate, 4 x 1mm thick spacers, 2 x spacer aligners and 2 x 1mm thick 24-sample combs, casting base and 2 x silicone seals; CAPGRM, 10 x 1mm glass capillaries, 4 x 1.5mm spacers, 2 x 1.5mm thick 1-D preparatory combs, 10 x blanking ports and 1 x gel extraction platform; plus EBGRM, 2 x electroblotting cassettes and 4 x fibre pads



TV200YK-MODSYS

Twin-plate maxi-gel unit with GRM and cooled gel tank, with built-in cooling coil and quick-fit tubing, lid, 2 x (20.5 x 20cm; W x H) plain glass plates, 2 x (20.5 x 20cm) notched glass plates, 1 x dummy plate, 4 x 1mm thick spacers, 2 x spacer aligners and 2 x 1mm thick 24-sample combs, casting base and 2 x silicone seals; CAPGRM, 10 x 1mm glass capillaries, 4 x 1.5mm thick spacers, 2 x 1.5mm thick 1-D preparatory combs, 10 x blanking ports and 1 x gel extraction platform; plus EBGRM, 2 x electroblotting cassettes and 4 x fibre pads



TV400YK-MODSYS

See page 76 for a full list of replacement parts and accessories